### **EXECUTIVE SUMMARY**

The District of Columbia Department Transportation (DDOT) conducted a study that evaluated the potential impacts of proposed redevelopment at Waterside Mall. The study area is located in Southwest Washington, DC and is shown in Figure ES-1.

#### **EXISTING CONDITIONS**

The major roadways in the Study area are 3<sup>rd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, I and M Streets SW. 4<sup>th</sup> Street is discontinuous between M and I Streets. The Washington Metropolitan Area Transit Authority provides extensive bus and rail service in the study area. The Waterfront Metrorail station, served by the Green line, is located at the intersection of 4<sup>th</sup> Street and M Street SW.

M Street/Maine Avenue is the most traveled road in the study area, with over 30,000 vehicles using it daily. The intersection of 7<sup>th</sup> Street and Maine Avenue is the location with the largest number of accidents in the study area.

Traffic congestion is greatest during the PM peak hours. Two intersections, 4<sup>th</sup> and I Streets and 4<sup>th</sup> and M Streets, are operating at

level of service (LOS) D during the PM peak hour. This indicates that traffic volumes are approaching the capacity of these intersections.

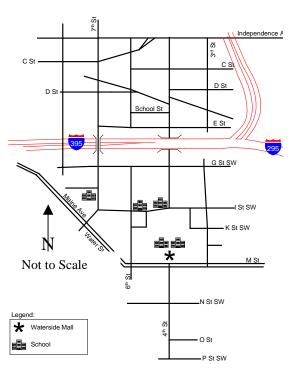
The Study Team conducted an extensive field evaluation of the transportation infrastructure in the study area. The Study Team identified existing transportation issues on 3<sup>rd</sup>, 4<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, G, I and M Streets, and area-wide issues associated with pedestrian safety around school buildings. Detailed descriptions of the existing transportation issues are presented in the study. In addition, many recommendations are made for improvements to these existing problems.

#### FUTURE DEVELOPMENT SCENARIOS

The Study Team evaluated the following scenarios for future conditions for the years 2010 and 2022:

1. Total Background Scenario with Other Area Developments and without New Development at Waterside Mall

Figure ES-1 – Study Area Map



- 2. With PUD Level of Development at Waterside Mall and without a Vehicular Connection Along 4<sup>th</sup> Street Between I and M Streets
- 3. With PUD Level of Development at Waterside Mall and with a Vehicular Connection Along 4<sup>th</sup> Street Between I and M Streets
- 4. With PUD Level of Development at Waterside Mall and with a Vehicular Connection Along the Eastern and Western Waterside Mall Service Roads Between I and M Streets

At the request of citizens, the Study Team conducted evaluations of three more options. One option assumed that an extension of 4<sup>th</sup> Street would be constructed to 6<sup>th</sup> Street via K Street. Another option assumed that the proposed service roads at the site would be operated as a one-way pair. The last option evaluated assumed that 3<sup>rd</sup> Street and 6<sup>th</sup> Street would be operated as a one-way pair. The Study team found that these three options would have significant detrimental effects on traffic operations in the study area and therefore are not recommended for implementation.

The Study Team included in the analysis of future conditions all other area developments between Independence Avenue and Buzzards Point and between Washington Channel and 4<sup>th</sup> Street SW. The Southeast Federal Center and the Anacostia Waterfront Initiative are expected to be the largest trip generators. Table ES-1 summarizes the existing, byright and Planned Unit Development (PUD) levels of development at Waterside Mall.

Table ES-1 Summary of Waterside Mall Development Levels

Land Use	Existing	By-Right <sup>1</sup>	2010 PUD	2022 PUD
Office	1,117,500 Sq. Ft. <sup>2</sup>	1,754,100 Sq. Ft.	1,693,500 Sq. Ft.	2,051,500 Sq. Ft.
Retail	104,500 Sq. Ft.	554,700 Sq. Ft.	75,000 Sq. Ft.	75,000 Sq. Ft.
Residential	0 Units	584 Units	200 Units	400 Units
Supermarket	30,000 Sq. Ft.	30,000 Sq. Ft.	30,000 Sq. Ft.	30,000 Sq. Ft.

<sup>1</sup>Likely scenario based on existing zoning. The by-right scenario represents the maximum level of development that may be constructed with the existing zoning. However, based on the PUD application, it is highly unlikely that the property would be developed at the by-right levels.

The Waterside Mall PUD development is expected to generate 3,732 and 4,870 daily trips in 2010 and 2022, respectively. The likely by-right scenario would generate 19,860 daily trips.

#### **SUMMARY OF FINDINGS**

### Scenario 1

The Study Team conducted a full evaluation of the scenarios listed above for 2010 and 2022. The assessment of the scenario with background growth, other area development and no new development at Waterside Mall indicates that for 2010 and 2022, several

<sup>&</sup>lt;sup>2</sup>1,000,000 Sq. Ft. of existing office space is vacant.

intersections are expected to operate at LOS F during the peak hours. Therefore, mitigation measures would be needed to address the expected deficiencies in the study area even without new development at the Waterside Mall.

## Scenarios 2 and 3

The scenarios with and without a 4<sup>th</sup> Street vehicular connection have different effects on traffic operations in the study area and on pedestrian conditions. The vehicular connection on 4<sup>th</sup> Street between M and I Streets would help minimize the impact of new development on traffic operations in the study area. The implementation of the 4<sup>th</sup> Street vehicular connection would help reduce traffic on 3<sup>rd</sup>, I and 6<sup>th</sup> Streets. While pedestrian movements would be safer with the scenario that does not include a vehicular connection, the conflicts between vehicles and pedestrians can be minimized with the implementation of mitigation measures throughout the connection.

## Scenario 4

The analysis indicates that traffic conditions under the scenario that uses service roadways east and west of 4<sup>th</sup> Street as an alternative to a vehicular connection of 4<sup>th</sup> Street between I and M Streets are significantly worse than under the scenario with a 4<sup>th</sup> Street vehicular connection. The proximity of the service roads to 3<sup>rd</sup> and 6<sup>th</sup> Streets precludes the installation of traffic signals at the intersections of the service roads with M and I Streets. The lack of traffic signals would result in long queues forming on the service roads and poor levels of service for study area intersections.

### RECOMMENDATIONS

Because of improved levels of service, reduced delay and queue lengths, and reduced traffic on local residential streets, the Study Team recommends that 4<sup>th</sup> Street be connected between I and M Streets and that this connection be made available to vehicles. Mitigation measures would have to be implemented to accommodate future growth in background traffic, other area developments and development at the Waterside Mall site. Figures ES-2 and ES-3 summarize existing transportation issues and recommended improvements. Figure ES-4 summarizes recommendations to mitigate the effects of future development on transportation operations in the study area. The preliminary planning cost estimates for these mitigation measures are presented in Appendix K of the report.

# **SELECT TO VIEW:**

ES-2 Existing Transportation Issues

# **SELECT TO VIEW:**

ES-3 Recommended Improvements to Address Existing Transportation Issues

## **SELECT TO VIEW:**

ES-4 Long-Term Mitigation Measures